Pedestrian and Bicycle Infrastructure NetworkData Catalog

North Carolina Department of Transportation Division of Bicycle and Pedestrian Transportation December 2014

PBIN Data Catalog

Where applicable, fields or attributes marked with an asterisk (*) are required data for NCDOT Planning Grant Initiative (PGI) communities to collect and/or update as a condition of award. PGI communities should consider including additional fields or attributes from the Data Catalog when inventorying focus areas or corridors, as identified through the plan development process. Each dataset provides a consistent set of attribute fields on existing and proposed bicycle, pedestrian, and shared-use path facilities for use in planning, project development, and analysis.

1. BICYCLE FACILTIES

The **Bicycle_Fac_Linear** feature class includes polyline data on existing and proposed facilities such as bike lanes, bike routes, bicycle boulevards, and paved shoulders. It also includes information on surface condition, facility width, slope, and rumble strips.

The **Bicycle_Fac_Point** feature class includes polyline data on existing and proposed facilities such as bike parking, crossing improvement, bike boxes, bike share kiosks, and bike detection loops. It also includes information on bicycle-oriented signage and hazardous grates. It also includes information on surface condition, facility width, slope, and rumble strips.

2. PEDESTRIAN FACILITIES

The **Ped_Fac_Linear** feature class includes polyline data on existing and proposed facilities such as sidewalks and other types of footpaths. It includes information on material, facility width, buffer, buffer width and slope.

The **Ped_Fac_Point** feature class includes point data on existing and proposed facilities such as crosswalks, pedestrian signals, curb extensions, and crossing islands. The data also includes signage and hazards.

3. SHARED USE PATH FACILITIES

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The **SUP_Fac_Linear** feature class includes polyline data on existing and proposed shared use path facilities such as greenways, trails, and mixed use paths.

The **SUP_Fac_Point** feature class includes polyline data on existing and proposed facilities such as crossing treatments for shared use paths, greenways, and trails. It also includes signage, access points and amenities for shared use facilities.

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The following table is not comprehensive but is intended to serve as a quick reference for the types of data that can be stored within each of the feature classes.

Linear

Facility Type – bike lane, paved shoulder, shared lanes, cycle tracks, and contra-flow bike lane

Signing and Marking bike route, shared lane markings, bicycle boulevard, wayfinding

Implementation – restripe, repave, reallocate, marking, widening

Other details – facility width, rumble strips, surface condition, facility name, associated roadway

Point

Facility Type – bike corral, maintenance station, bike lockers, bike parking, bike share, bike detection, bike signal, bike box

Signage – bike lane, bicycle may use full lane, right turn yield to bikes, bicycle actuate signal, etc.

Other details – hazardous grates

Linear

Facility Type – sidewalk, footpath Pedestrian Material - asphalt,

concrete, gravel, brick/pavers, dirt/natural, boardwalk

Buffer - green zone, parking/transit stop zone, bicycle zone

Implementation resurface, widening, restripe, reallocate, new construction

Other details – facility width, buffer width, surface condition, slope, lighting, associated roadway

Point

Facility Type – marked crosswalk, mid-block crossing, rectangular rapid flashing beacon, pedestrian hybrid beacon, curb ramp, crossing island, curb extension, underpass and overpass (pedestrianspecific).

Signage – school crossing assembly, in-street pedestrian crossing, overhead pedestrian crossing, yield here to pedestrians, etc.

Other details - hazards, ADA compliance

Linear

Facility Type – shared use path, sidepath, unimproved trail Material - asphalt,

concrete, gravel, brick/pavers, dirt/natural, boardwalk

Other details – surface condition, facility width, buffer width, facility name, slope, associated geographic reference

Point

Amenities – motor vehicle parking, bench, restroom. lockers, water fountain

Access – trailhead, access point

Crossing Treatment - SUP signal, bollard, underpass, overpass

Signage - trail crossing, railroad crossing, destination and guide signs, etc.

1. BICYCLE FACILITIES

1.1. Feature Class: Bicycle_Fac_Linear (Linear Bicycle Features)

1.1.1 Entity = ENTITY (text, 50 characters)

For existing facilities, use the credible entity, agency, or organization who is responsible for the collection, storage or maintenance of the bicycle facility data being submitted. For proposed facilities, enter data only from governmental agencies with adopted plans, or entities reporting on professional studies (corridor, feasibility, etc.) where the locality was involved.

1.1.2 Plan Year = PLAN_YEAR (double)*

If the bicycle linear data is taken from an adopted plan, enter the date in year format in which the plan was adopted.

1.1.3 Collection Year = COLCT_YEAR (short integer, precision 4)*

The date, in year format, when the data was most recently collected and/or updated.

1.1.4 Existing Facility Type = EXST _FACIL (text, 30 characters)*

The inventory of existing linear bicycle facilities. Note that inventories or identification of existing facilities may be from any credible source. Where there is more than one treatment on a roadway segment such as a bike lane on an uphill and shared lane on a downhill, each should be included as a discreet linear data piece.

- Bike Lane A portion of the roadway that has been designated for preferential or exclusive use for bicyclists by pavement markings and, if used, signs. It is intended for one-way travel, usually in the same direction as the adjacent traffic lane, unless designated as a contra-flow lane. (AASHTO Guide for the Development of Bicycle Facilities, 2012)
- **Buffered Bike Lane** Conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane. (NACTO Urban Bikeway Design Guide, 2011)
- Paved Shoulder The portion of the roadway contiguous with the traveled way that accommodates stopped vehicles, emergency vehicles, and lateral support of subbase, base, and surface courses. Shoulders, where paved, are often used by bicyclists. (AASHTO Guide for the Development of Bicycle Facilities, 2012)
- Shared Lane A lane of the traveled way that is open to both bicycle and motor vehicle travel where there are improvements in roadway width, signing, or marking for bicycling purposes. Shared Lanes often include improvements such as Shared Lane Markings or are designated as Bicycle Boulevards which must be indicated under the field Existing Signing and Marking. Where intended explicitly for purposes of serving as a bicycling facility, wide outside lanes should also be included in this category.
- Cycle Track An exclusive bike facility that combines the user experience of a separated path with
 the on-street infrastructure of a conventional bike lane. (NACTO Urban Bikeway Design Guide,
 2011)
- Contra-flow Bike Lane Bicycle lanes designed to allow bicyclists to ride in the opposite direction of motor vehicle traffic. (NACTO Urban Bikeway Design Guide, 2011)
- Other A facility that does not fall under an existing value.

1.1.5 Existing Signing and Marking = EXST_SIGN (text, 30 characters)*

Signing and marking whose primary purpose is to distinguish a facility for bicycling or indicate bicycling routes. Bikeway markings represent any device applied onto the pavement surface and intended to

designate a specific right-of-way, direction, potential conflict area, or route option. Connector routes should be classified as bike routes.

- **Bike Route** A roadway or bikeway designated by the jurisdiction having authority, either with a unique route designation or with Bike Route signs, along which bicycle guide signs may provide directional and distance information. (AASHTO Guide for the Development of Bicycle Facilities, 2012)
- Wayfinding Comprehensive signing and/or pavement markings to guide bicyclists to their destinations along preferred bicycle routes. (NACTO Urban Bikeway Design Guide, 2011)
- **Bicycle Boulevard** A street segment or series of contiguous street segments, that has been modified to accommodate through bicycle traffic and minimize through motor traffic. (AASHTO Guide for the Development of Bicycle Facilities, 2012)
- Shared Lane Markings Road markings used to indicate a shared lane environment for bicycles and automobiles and assist with bicyclist positioning on the roadway. Also called "sharrows." (adapted from the NACTO Urban Bikeway Design Guide, 2011)

1.1.6 Existing Facility Name: Local = EXST_NAME (text, 50 characters)*

The name of the existing signed facility, used for local designations. This is the local name of the bike route, way-finding route or bicycle boulevard. A single route segment may have multiple designations (local, county, state, and national).

1.1.7 Existing Facility Name: County = EXST_ NAME2 (text, 50 character)*

Name of the existing signed facility, used for county-wide designations. This is the name of the county bike route or way-finding route. A single route segment may have multiple designations (local, county, state, and national).

1.1.8 Existing Facility Name: State = EXST_NAME3 (text, 50 characters)*

Name of the existing signed facility, used for statewide designations. This is the name of the state bike route or way-finding route. A single route segment may have multiple designations (local, county, state, and national).

1.1.9 Existing Facility Name: National = EXST NAME4 (text, 50 character)*

Name of the existing signed facility, used for national designations. This is the name of the national bike route or way-finding route. A single route segment may have multiple designations (local, county, state, and national).

1.1.10 Surface Condition = COND BIKE (text, 30 characters)

Subjective score for surface condition of existing facilities.

- Good Sound Surface Condition
- Needs Improvement Facility has a surface feature that needs to be addressed

1.1.11 Facility Width = WIDTH (short integer, precision 3)*

Width of the bicycle facility for the majority of a segment. For Bike Lane, Shoulder, Buffered Bike Lane, and Contra-flow Bike Lanes, width is measured from the outermost motor vehicle travel lane to the edge of pavement or boundary of parking lane. The gutter pan on an urban street is not considered part of a bicycle facility. For buffered bike lanes and contraflow lanes, the buffer is included in the width if considered by the jurisdiction as a part of the bicycling facility. For Wide Outside Lane and lanes with shared lane markings width is measured as the width of the shared travel lane.

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1.1.12 Rumble Strips = RMBL_STRP (text, 30 characters)

Indicate the presence or absence of rumble strips along a street segment, and whether the strips are continuous or spaced for bicyclists to cross.

• None – not present

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- Continuous present, without gaps
- **Spaced** present, with gaps

1.1.13 Proposed Facility Type = PROP_FACIL (text, 30 characters)*

The inventory of proposed or planned bicycling facilities. This list may not be exhaustive of facilities proposed in future plans. Only governmental agencies with adopted plans, or entities reporting on professional studies (corridor, feasibility, etc.) where the locality was involved should include data on proposed facilities. Where there is more than one treatment on a roadway segment such as a bike lane on an uphill and shared lane on a downhill, each should be included as a discreet linear data piece.

- **Bike Lane** A portion of the roadway that has been designated for preferential or exclusive use for bicyclists by pavement markings and, if used, signs. It is intended for one-way travel, usually in the same direction as the adjacent traffic lane, unless designated as a contra-flow lane. (AASHTO Guide for the Development of Bicycle Facilities, 2012)
- **Buffered Bike Lane** Conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane. (NACTO Urban Bikeway Design Guide, 2011)
- Paved Shoulder The portion of the roadway contiguous with the traveled way that accommodates stopped vehicles, emergency vehicles, and lateral support of subbase, base, and surface courses. Shoulders, where paved, are often used by bicyclists. (AASHTO Guide for the Development of Bicycle Facilities, 2012)
- Shared Lane A lane of the traveled way that is open to both bicycle and motor vehicle travel where there are improvements in roadway width, signing, or marking for bicycling purposes. Shared Lanes often include improvements such as Shared Lane Markings or are designated as Bicycle Boulevards which must be indicated under the field Proposed Signing and Marking. Where intended explicitly for purposes of serving as a bicycling facility, wide outside lanes should also be included in this category.
- **Cycle Track** An exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. (NACTO Urban Bikeway Design Guide, 2011)
- Contra-flow Bike Lane Bicycle lanes designed to allow bicyclists to ride in the opposite direction of motor vehicle traffic. (NACTO Urban Bikeway Design Guide, 2011)
- **Improvement unspecified** Proposed improvement that is unspecified, typically plan or study level information.

1.1.14 Implementation Method = IMPL_MTHD (text, 30 characters)

The method for implementing proposed facilities. Method of implementation identified to install proposed or planned facilities, or to generally improve a roadway segment for bicycling.

- **Restripe** adjustment in the lateral placement of existing travel lanes, without removing or adding any lanes, to reallocate roadway space to improve the roadway segment for bicyclists.
- **Repave** implementation of an as yet unspecified improvement for bicyclists to occur the next time the roadway segment is scheduled to be repaved does not include a proposed repaving performed simply for maintenance purposes.
- **Reallocate** restructuring of the roadway space to improve the segment for bicyclists by reallocating roadway space by removing a motor vehicle travel lane (i.e. road diet).
- **Marking** striping or painting facilities such as Sharrows or Bike Lanes without the need for any additional improvements or adjustments to the roadway.

• **Widening** – increasing the width of the paved portion of the roadway to specifically improve the roadway segment for a bicycling facility.

1.1.15 Proposed Signing and Marking = PROP_SIGN (text, 30 characters)*

Proposed signing and marking whose primary purpose is to distinguish a facility for bicycling or indicate bicycling routes. Bikeway markings represent any device applied onto the pavement surface and intended to designate a specific right-of-way, direction, potential conflict area, or route option. Connector routes should be classified as bike routes.

- **Bike Route** A roadway or bikeway designated by the jurisdiction having authority, either with a unique route designation or with Bike Route signs, along which bicycle guide signs may provide directional and distance information. (AASHTO Guide for the Development of Bicycle Facilities, 2012)
- Wayfinding Comprehensive signing and/or pavement markings to guide bicyclists to their destinations along preferred bicycle routes. (NACTO Urban Bikeway Design Guide, 2011)
- Bicycle Boulevard A street segment or series of contiguous street segments, that has been
 modified to accommodate through bicycle traffic and minimize through motor traffic. (AASHTO
 Guide for the Development of Bicycle Facilities, 2012)
- Shared Lane Markings Road markings used to indicate a shared lane environment for bicycles and automobiles and assist with bicyclist positioning on the roadway. Also called "sharrows." (adapted from the NACTO Urban Bikeway Design Guide, 2011)
- Unspecified Proposed signing or marking that is unspecified, typically plan or study level information.

1.1.16 Proposed Facility Name = PROP_ NAME (text, 50 characters)

The name of the proposed signed facility. The official name of the bike route, wayfinding or bicycle boulevard identified in the Proposed Signed Facility field.

1.1.17 Roadway = RDWY_BIKE (text, 3050 characters)*

Name of roadway associated with the bicycle facility, where available. Allows for identification of exact roadway segment the bicycle facility corresponds to, even in cases of lack of congruence with roadway shapefiles.

1.1.18 Cardinal Direction = CARD_DIRCT (text, 30 characters)*

Location detail for existing or proposed linear features that may be on one or more sides of a segment. This must be included where more clarification about the placement or position of the facility on the roadway is necessary.

- North North side of the roadway
- **South** South side of the roadway
- **East** East side of the roadway
- West West side of the roadway
- Both Both sides of the roadway

1.2. Feature Class: Bicycle_Fac_Point (Point Bicycle Features)

1.2.1 Entity = ENTITY (text, 50 characters)

For existing facilities, use the credible entity, agency, or organization who is responsible for the collection, storage or maintenance of the bicycle facility data being submitted. For proposed facilities, enter data only from governmental agencies with adopted plans, or entities reporting on professional studies (corridor, feasibility, etc.) where the locality was involved.

1.2.2 Plan Year = PLAN_YEAR (double)*

If the bicycle point data is taken from an adopted plan, enter the date in year format in which the plan was adopted.

1.2.3 Collection Year = COLCT_YEAR (short integer, precision 4)*

The date, in year format, when the data was most recently collected and/or updated.

1.2.4 Existing Feature Type = EXST_FACIL (text, 30 characters)*

The inventory of existing point bicycle facilities. Note that inventories or identification of existing facilities may be from any credible source. If multiple features are in one location, each feature should be an individual data point.

- **Bike Corral** A large rack designed for parking multiple bicycles in high-demand areas, usually in the space provided for one or two parked cars.
- Bike Maintenance Station A resource provided to the public for bicycle maintenance
- Bike Lockers Secure bicycle storage area
- **Bike Parking** Racks or objects provided specifically for the purpose of supporting and enabling the bicycle to be secured
- Bike Rental/Bike Share A service in which bicycles are made available for shared use to individuals
- **Bike Detection** Actuation at signal that detects bicyclists and alerts signal controller of bicycle crossing demand
- **Bike Signal** Electrically powered traffic control device to provide guidance for bicyclists at intersections where they may have different needs from other road users (bicycle-only movements, leading bicycle intervals, etc.)
- **Bike Box** a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase (NACTO Urban Bikeway Design Guide, 2011)
- Other Intersection Treatment any intersection treatment not already enumerated, including but not limited to two-stage turn queue boxes intersection crossing markings, and combined bike lane/turn lane

1.2.5 Existing Signage = EXST_SIGN (text, 80 characters)

Existing signage with messaging specifically to bicyclists or to motorists about bicycle use. Signage from Chapter 9. Traffic Control For Bicycle Facilities (MUTCD, 2009)

- Bike Lane (R3-17)
- Bike Lane Ahead/Ends (R3-17a, R3-17b)
- No Parking Bike Lane (R7-9 or R7-9a)
- Bicycle May Use Full Lane (R4-11)
- Right Turn Yield to Bikes (R4-4)
- **Bicycle Route** (M1-8, M1-9)
- Bicyclists Use Pedestrian Signal (R9-5)
- Bicyclists Yield to Pedestrians (R9-6)
- **Bicycle Actuate Signal** (R9-5, R10-22, R10-24, R10-26)
- Share the Road (W16-1)
- Bicycle Destination and Guide Sign unspecified
- Bicycle Warning unspecified
- Bicycle Regulatory –unspecified

1.2.6 Hazardous Grate = HZRD_GRATE (text, 30 characters)

Existing grate in a roadway that is a hazard to bicyclists.

• Yes - Presence of hazard

No – Absence of hazard

1.2.7 Proposed Feature Type =PROP_FACIL (text, 50 characters)*

Proposed or planned point bicycle features. These improvements must come from an adopted plan or from a professional report (feasibility study, corridor study, etc.) generated with involvement of a governmental entity.

- **Bike Corral** A large rack designed for parking multiple bicycles in high-demand areas, usually in the space provided for one or two parked cars.
- Bike Maintenance Station A resource provided to the public for bicycle maintenance
- **Bike Lockers** Secure bicycle storage area
- **Bike Parking** Racks or objects provided specifically for the purpose of supporting and enabling the bicycle to be secured
- Bike Rental/Bike Share A service in which bicycles are made available for shared use to individuals
- **Bike Detection** Actuation at signal that detects bicyclists and alerts signal controller of bicycle crossing demand
- **Bike Signal** Electrically powered traffic control device to provide guidance for bicyclists at intersections where they may have different needs from other road users (bicycle-only movements, leading bicycle intervals, etc.)
- **Crossing Improvement unspecified** A location identified for a crossing improvement which has yet to be specified, typically from plan level data
- **Grade Separation unspecified** A location identified for a grade separation which has yet to be specified, typically from plan level data
- **Bike Box** a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase (NACTO Urban Bikeway Design Guide, 2011)
- Other Intersection Treatment any intersection treatment not already enumerated, including but not limited to two-stage turn queue boxes intersection crossing markings, and combined bike lane/turn lane

1.2.8 Proposed Signage = PROP_SIGN (text, 80 characters)

Proposed signage with messaging specifically to bicyclists or to motorists about bicycle use. Signage from Chapter 9. Traffic Control For Bicycle Facilities (MUTCD, 2009)

- **Bike Lane** (R3-17)
- Bike Lane Ahead/Ends (R3-17a, R3-17b)
- No Parking Bike Lane (R7-9 or R7-9a)
- Bicycle May Use Full Lane (R4-11)
- Right Turn Yield to Bikes (R4-4)
- Bicycle Route (M1-8, M1-9)
- Bicyclists Use Pedestrian Signal (R9-5)
- Bicyclists Yield to Pedestrians (R9-6)
- **Bicycle Actuate Signal** (R9-5, R10-22, R10-24, R10-26)
- Share the Road (W16-1)
- Bicycle Destination and Guide Sign unspecified
- Bicycle Warning unspecified
- Bicycle Regulatory unspecified

1.2.9 Roadway = RDWY BIKE (text, 50 characters)*

Name of roadway associated with the bicycle feature, where available. Allows for identification of exact roadway segment, especially in cases of lack of congruence with roadway shapefiles.

1.2.10 Cardinal Direction = CARD_DIRCT (text, 30 characters)*

Location detail for existing or proposed point features that may be on one or more sides of a segment or at one or more legs of an intersection.

- North North side of the intersection/roadway
- **South** South side of the intersection/roadway
- **East** East side of the intersection/roadway
- West West side of the intersection/roadway
- **Both** Both sides of the intersection/roadway
- **All** All sides of the intersection

2. PEDESTRIAN FACILITIES

2.1. **Feature Class: Ped_Fac_Linear** (Linear Pedestrian Features)

2.1.1 Entity = ENTITY (text, 50 characters)

For existing facilities, use the credible entity, agency, or organization who is responsible for the collection, storage or maintenance of the pedestrian facility data being submitted. For proposed facilities, enter data only from governmental agencies with adopted plans, or entities reporting on professional studies (corridor, feasibility, etc.) where the locality was involved.

2.1.2 Plan Year = PLAN_YEAR* (double)

If the pedestrian linear data is taken from an adopted plan, enter the date in year format in which the plan was adopted.

2.1.3 Collection Year = COLCT_YEAR* (short integer, precision 4)

The date, in year format, when the data was most recently collected and/or updated.

2.1.4 Existing Facility Type = EXST_FACIL* (text, 30 characters)

Inventory of existing pedestrian linear facilities. Note that inventories or identification of existing facilities may be from any credible source. (Sidepaths are characterized under the Shared-Use Path linear layer.)

- **Sidewalk** that portion of a street between the curb line, or the lateral line of a roadway, and the adjacent property line or on easements of private property that is paved or improved and intended for use by pedestrians (MUTCD, 2009).
- **Footpath** any unpaved single-track trail that may be used only by able-bodied pedestrians, including goat trails or other 'desire lines'.

2.1.5 Material = MATERIAL* (text, 30 characters)

Surface material of the pedestrian facility.

- Asphalt Asphalt surface
 - Concrete Concrete surface
 - Gravel Gravel or crushed stone surface
 - **Brick/Pavers** Bricks or pavers aligned to make a walkway surface
 - **Dirt/Natural** A natural or dirt surface, unpaved.
 - Boardwalk A boarded path used to construct a walkway surface
 - Other Any other value not listed

2.1.6 Surface Condition = COND PED (text, 30 characters)

Subjective score for surface condition of existing facility along a pedestrian route.

- **Good** smooth, slip-resistant surface that is ADA compliant with no cross-slope, heaving or tripping hazards for the majority of the segment.
- **Needs Improvement** surface with cross-slope problems, deterioration, degradation, or tripping hazards that result in non-compliance with ADA for the majority of the segment.

2.1.7 Facility Width = WIDTH* (double)

Width of pedestrian facility in feet.

2.1.8 Buffer = BUFFER (text, 30 characters)

A buffer is a strip of land that separates vehicular traffic from the pedestrian facility. Other elements of complete streets can also contribute to a buffer including bicycle lanes or on-street parking.

• **Green Zone** – generally a landscaped area between the street pavement and the pedestrian way. In a high-density urban area, this area may be hardscaped with trees in planters. This zone may include features such as landscaping, signs, benches, fire hydrants, and utility poles. (NCDOT Complete Streets Guidelines, 2012)

- Parking/Transit Stop Zone a section of the public right of way that allows for parking motor vehicles. It may also contain areas that are used for a bus pullout, where appropriate. (NCDOT Complete Streets Guidelines, 2012)
- **Bicycle Zone** an area in the public right of way reserved for bicycling facilities. To be included in the buffer, it must provide spatial separation between the pedestrian zone and the motor vehicle zone.
- None indicates no buffer is present

2.1.9 Buffer Width = BFFER_WDTH (double)

Buffer width, in feet, as measured from edge of the closest motor vehicle travel lane to the effective pedestrian route.

2.1.10 Slope = SLOPE_PED (float, precision 4, scale 2)

Running slope of the pedestrian facility. Use positive whole integers. Identifies pedestrian linear facilities with running slopes greater than 5% (ADA compliance threshold) for the majority of the line segment.

2.1.11 Proposed Facility Type = PROP_FACIL* (text, 30 characters)

Proposed or planned pedestrian facilities. This list may not be exhaustive of facilities proposed in future plans. Only governmental agencies with adopted plans, or entities reporting on professional studies (corridor, feasibility, etc.) where the locality was involved should include data on proposed facilities.

- **Sidewalk** that portion of a street between the curb line, or the lateral line of a roadway, and the adjacent property line or on easements of private property that is paved or improved and intended for use by pedestrians (MUTCD, 2009).
- **Footpath** any unpaved single-track trail that may be used only by able-bodied pedestrians, including goat trails or other 'desire lines'.
- Improvement unspecified

2.1.12 Implementation Method = IMPL_MTHD (text, 30 characters)

Method of implementation identified to install proposed or planned facilities, or to generally improve a roadway segment for pedestrians.

- **Resurface** scheduled improvement specifically to pedestrians to occur the next time the roadway segment is scheduled to be repaved or resurfaced does not include a proposed repaving performed simply for maintenance purposes.
- **Widening** installation of proposed pedestrian improvement as an incidental part of a roadway widening project.
- Restripe adjustment in the lateral placement of existing travel lanes, but not the removal of lanes, to reallocate roadway space and allow for a greater buffer width between motor vehicle lanes and existing or proposed pedestrian facilities.
- **Reallocate** adjustment of the roadway space to improve the segment for pedestrians by removing a motor vehicle travel lane (i.e. road diet).
- **New Construction** addition of a pedestrian facility along an existing roadway as an independent project where the travel lanes or width of the road are not changed for the improvement to occur.

2.1.13 Existing Pedestrian Lighting = EXST LIGHT (text, 30 characters)

Inventory of existing pedestrian-scale lighting for the majority of the segment.

• Yes – presence of pedestrian-scale lighting

• No – absence of pedestrian-scale lighting

2.1.14 Proposed Pedestrian Lighting = PROP _LIGHT (text, 30 characters)

Location where pedestrian-scale lighting is proposed along the majority of the segment.

- Yes Proposed pedestrian scale lighting
- No No proposed lighting

2.1.15 Roadway = RDWY_PED* (text, 50 characters)

Name of roadway associated with the pedestrian facility, where available. Allows for identification of exact roadway segment, especially in cases of lack of congruence with roadway shapefiles.

2.1.16 Cardinal Direction = CARD_DIRCT* (text, 30 characters)

Location detail for existing or proposed linear features that may be on one or more sides of a segment. This must be included where more clarification about the placement or position of the facility on the roadway is necessary.

- **North** North side of the roadway
- **South** South side of the roadway
- East East side of the roadway
- West West side of the roadway
- **Both** Both sides of the roadway

2.1.17 Existing Facility Name = EXST_NAME (text, 50 characters)

The primary name for the existing pedestrian facility.

2.1.18 Proposed Facility Name = PROP_NAME (text, 50 characters)

The primary name for the proposed pedestrian facility.

2.2. **Feature Class: Ped_Fac_Point** (Point Pedestrian Features)

2.2.1 Entity = ENTITY (text, 50 characters)

For existing facilities, use the credible entity, agency, or organization who is responsible for the collection, storage or maintenance of the pedestrian facility data being submitted. For proposed facilities, enter data only from governmental agencies with adopted plans, or entities reporting on professional studies (corridor, feasibility, etc.) where the locality was involved.

2.2.2 Plan Year = PLAN_YEAR* (double, precision 4)

If the pedestrian point data is taken from an adopted plan, enter the date in year format in which the plan was adopted.

2.2.3 Collection Year = COLCT_YEAR* (short integer, precision 4)

The date, in year format, when the data was most recently collected and/or updated.

2.2.4 Existing Facility = EXST_FACIL (text, 50 characters)

Inventory of existing pedestrian point features. Note that inventories or identification of existing facilities may be from any credible source. The variables given are not exhaustive and may not include new innovations.

• Marked Crosswalk* - the portion of the roadway for pedestrians to use in crossing the street, designated with markings to illustrate and clarify the crossing location

- Mid-block Crossing* a marked crosswalk that occurs in a location other than an intersection.
- **Pedestrian Signal*** a signal head providing special types of traffic signal indications exclusively intended for controlling pedestrian traffic
- Rectangular Rapid Flashing Beacon* a warning beacon activated by a pedestrian at an
 uncontrolled crossing location which flashes rapidly in a wig-wag "fickering" flash pattern to signal
 drivers to stop
- **Pedestrian Hybrid Beacon*** a pedestrian activated warning device located over a marked midblock pedestrian crossings which when activated, displays a flash pattern that signals motorists to stop, and gives pedestrians a WALK indication
- **Curb Ramp** a ramp with tactile paving that is graded down from the surface of the sidewalk or path to the surface of an adjoining street
- **Crossing Island** a raised island typically located in the center of the roadway to assist with pedestrians with crossing
- **Curb Extension** a traffic calming measure primarily used to extend the sidewalk and reduce crossing distance for pedestrians and improve visibility of a pedestrian to approaching vehicles
- Underpass (for pedestrian-specific facilities)* a structure that crosses under another roadway or thoroughfare, specific to pedestrian use
- Overpass (for pedestrian-specific facilities)* a structure or bridge that crosses over another roadway or thoroughfare, specific to pedestrian use

2.2.5 Existing Signage = EXST_SIGN (text, 80 characters)

Existing signage with messaging specifically to pedestrians or to motorists about pedestrian activity. Signage from MUTCD, 2009.

- School Advance Crossing Assembly
- School Crossing Sign Assembly
- Pedestrian Traffic (W11-2)
- In-Street Pedestrian/School Crossing (R1-6, R1-6b)
- Overhead Pedestrian Crossing (R1-9)
- Turning Vehicles Yield to Pedestrians (R10-15, R10-15R, R10-15L)
- Yield Here to Pedestrians (R1-5L, R1-5R, R1-5aL, R1-5aR)
- Push Button Signage (R10-3 through R10-26)
- No Pedestrian Crossing (R9-3, R9-3a)
- Handicapped (W11-9)
- School Bus Stop Ahead (S3-1)
- Pedestrian Destination and Guide Sign unspecified
- Pedestrian Warning unspecified
- Pedestrian Regulatory unspecified

2.2.6 Hazards = HAZARD (text, 30 characters)

Inventory of pedestrian point hazards.

- **Poor lighting** area requires pedestrian lighting improvements
- **Poor drainage** area requires drainage improvements
- **Obstacle** any physical impediment or protrusion that is within, blocks or infringes on the accessible pedestrian route. Examples may include utilities structures (poles, cabinets, hydrants, etc.), improperly placed street furniture or trees, improperly placed signage, etc.

2.2.7 ADA (binary) = ADA_PED (double)

ADA compliance is denoted by "1"; non-compliance is denoted by "0". Define Curb Ramp as "compliant" when slope, cross-slope, material and flares (if present) comply with PROWAG; truncated domes, or other acceptable detectable warnings, in contrasting color are present; and ramp is located and oriented to head pedestrians in the correct direction for the crossing. Define Pedestrian Signal as "compliant" when APS is present; any pushbuttons are oriented in the direction of travel for the crossing; and the signal timing is correctly calculated per the current MUTCD. This definition is not exhaustive of details that may qualify a pedestrian point feature as ADA compliant.

2.2.8 Proposed Facility Type = PROP FACIL* (text, 50 characters)

Proposed or planned point pedestrian features. These improvements must come from an adopted plan or from a professional report (feasibility study, corridor study, etc.) generated with involvement of a governmental entity. The variables may not be exhaustive of future plans.

- Marked Crosswalk the portion of the roadway for pedestrians to use in crossing the street, designated with markings to illustrate and clarify the crossing location
- Mid-block Crossing a marked crosswalk that occurs in a location other than an intersection.
- **Pedestrian Signal** a signal head providing special types of traffic signal indications exclusively intended for controlling pedestrian traffic
- Rectangular Rapid Flashing Beacon a warning beacon activated by a pedestrian at an uncontrolled crossing location which flashes rapidly in a wig-wag "fickering" flash pattern to signal drivers to stop
- Pedestrian Hybrid Beacon a pedestrian activated warning device located over a marked mid-block pedestrian crossings which when activated, displays a flash pattern that signals motorists to stop, and gives pedestrians a WALK indication
- **Curb Ramp** a ramp with tactile paving that is graded down from the surface of the sidewalk or path to the surface of an adjoining street
- **Crossing Island** a raised island typically located in the center of the roadway to assist with pedestrians with crossing
- **Curb Extension** a traffic calming measure primarily used to extend the sidewalk and reduce crossing distance for pedestrians and improve visibility of a pedestrian to approaching vehicles
- Underpass (for pedestrian-specific facilities) a structure that crosses under another roadway or thoroughfare, specific to pedestrian use
- Overpass (for pedestrian-specific facilities) a structure or bridge that crosses over another roadway or thoroughfare, specific to pedestrian use
- Grade Separation unspecified planning level information indicating a proposed grade separated facility
- **Crossing Improvement unspecified** indicates the need for proposed improvements to pedestrian crossing environment, typically planning level data

2.2.9 Proposed Improvement Type = IMPROVEMNT* (text, 30 characters)

Proposed planning level improvements to existing pedestrian point features. The variables given are not exhaustive and may not include new innovations.

- **High-Visibility Crosswalk** paint crosswalk with high-visibility marking.
- **Curb Ramp Upgrade** an improvement made to an existing ramp without relocating it to bring it into compliance, such as adding detectable warnings, or adjusting the slope.
- **Curb Radii Tightening** an improvement to the curb radius to improve the environment for pedestrians. This may include general pedestrian facility improvements at the corner, such as installing or moving curb ramps or installing, moving and/or upgrading crosswalks.

2.2.10 Proposed Signage = PROP_SIGN (text, 80 characters)

Proposed signage with messaging specifically to pedestrians or to motorists about pedestrian activity

- School Advance Crossing Assembly
- School Crossing Sign Assembly
- Pedestrian Traffic (W11-2)
- In-Street Pedestrian/School Crossing (R1-6, R1-6b)
- Overhead Pedestrian Crossing (R1-9)
- Turning Vehicles Yield to Pedestrians (R10-15, R10-15R, R10-15L)
- Yield Here to Pedestrians (R1-5L, R1-5R, R1-5aL, R1-5aR)
- **Push Button Signage (**R10-3 through R10-26)
- No Pedestrian Crossing (R9-3, R9-3a)
- Handicapped (W11-9)
- School Bus Stop Ahead (S3-1)
- Pedestrian Destination and Guide Sign unspecified
- Pedestrian Warning unspecified
- Pedestrian Regulatory unspecified

2.2.11 Roadway = RDWY_PED* (text, 50 characters)

Name of roadway associated with the pedestrian feature, where available. Allows for identification of exact roadway segment the bicycle facility corresponds to, even in cases of lack of congruence with roadway shapefiles.

2.2.12 Cardinal Direction = CARD_DIRCT* (text, 30 characters)

Location detail for existing or proposed point features that may be on one or more sides of a segment or at one or more legs of an intersection.

- North North side of the intersection
- South South side of the intersection
- East East side of the intersection
- **West** West side of the intersection
- **Both** Both sides of the intersection
- All All sides of the intersection

3. SHARED USE PATH FACILITIES

3.1. Feature Class: SUP_Fac_Linear (Linear Shared Use Path Features)

3.1.1 Entity = ENTITY (text, 50 characters)

For existing facilities, use the credible entity, agency, or organization who is responsible for the collection, storage or maintenance of the shared use facility data being submitted. For proposed facilities, enter data only from governmental agencies with adopted plans, or entities reporting on professional studies (corridor, feasibility, etc.) where the locality was involved.

3.1.2 Plan Year = PLAN YEAR* (double)

If the shared use path linear data is taken from an adopted plan, enter the date in year format in which the plan was adopted.

3.1.3 Collection Year = COLCT_YEAR* (short integer, precision 4)

The date, in year format, when the data was most recently collected and/or updated.

3.1.4 Existing Facility Type = EXST_FACIL* (text, 50 characters)

Inventory of existing shared use path linear facilities.

- Shared Use Path facility for the use of bicyclists and pedestrians, including greenways and multiuse trails, separated from the roadway by an open space or barrier, or within an independent rightof-way.
- **Sidepath** shared use path facility for the use of bicyclists and pedestrians, including greenways and multi-use trails, which are separated from the road but located immediately adjacent and parallel to a roadway.
- Unimproved Trail an unpaved/unimproved facility open to use for both bicyclists and pedestrians.

3.1.5 Existing Facility Name = EXST_NAME* (text, 50 characters)

The official name of the shared use path. National designated facilities should always be listed as the primary facility name. State, regional, county and local names listed for the secondary name.

3.1.6 Existing Facility Secondary Name = EXST_ NAME2* (text, 50 character)

The secondary name of the existing signed facility used in cases where a segment may represent two named facilities, like a designated national trail as well as a regional trail. Facilities should list the primary facility name followed by regional, county or local names as the secondary name in this field.

3.1.7 Material = MATERIAL* (text, 30 characters)

Surface material of the SUP facility. Other materials may include rubber paths, wood composites, or stone.

- Asphalt Asphalt surface
- Concrete Concrete surface
- **Gravel** Gravel or crushed stone surface
- Brick/Pavers Bricks or pavers aligned to make a walkway surface
- **Dirt/Natural** A natural or dirt surface, unpaved.
- Boardwalk A boarded path used to construct a walkway surface
- Other Any other value not listed

3.1.8 Surface Condition = COND_SUP (text, 30 characters)

Subjective score for surface condition of existing facilities.

• Good – sound surface condition.

• **Needs Improvement** - facility has a surface feature that needs to be addressed (may include problems like hazardous grates or drainage problems).

3.1.9 Width = WIDTH* (short integer, precision 3)

Width of the shared use path facility, in feet.

3.1.10 Buffer Width = BUFR_WIDTH* (long integer, precision 4)

Width of path buffer, in feet, as measured from the edge of the closest motor vehicle travel lane to the adjacent edge of the shared use path. Note that this field only applies to sidepaths.

3.1.11 Slope = SLOPE SUP (float, precision 4, scale 2)

Running slope of the shared use path using a positive whole integer. Identifies shared use paths with slopes greater than 5% (ADA compliance threshold) for the majority of the line segment.

3.1.12 Proposed Facility Type = PROP_FACIL* (text, 50 characters)

Proposed or planned shared use path facilities. This list may not be exhaustive of facilities proposed in future plans. Only governmental agencies with adopted plans, or entities reporting on professional studies (corridor, feasibility, etc.) where the locality was involved should include data on proposed facilities.

- Shared Use Path facility for the use of bicyclists and pedestrians, including greenways and multiuse trails, separated from the roadway by an open space or barrier, or within an independent rightof-way.
- **Sidepath** shared use path facility for the use of bicyclists and pedestrians, including greenways and multi-use trails, which are separated from the road but located immediately adjacent and parallel to a roadway.
- Unimproved Trail an unpaved/unimproved facility open to use for both bicyclists and pedestrians.
- **Improvement unspecified** a shared use path facility of an unspecified type, usually from planning level studies

3.1.13 Proposed Facility Name = PROP_NAME (text, 50 characters)

The primary name of the proposed shared use path.

3.1.14 Proposed Facility Secondary Name = PROP_NAME2 (text, 50 characters)

The secondary name of the facility used in cases where a segment may represent two named facilities, like a designated national trail as well as a regional trail.

3.1.15 Geographic Reference = GEO NAME* (text, 50 characters)

Name of associated roadway, waterway, ridgeline or other geographic feature along which the SUP generally aligns. This field is used to ensure that integrated shared use paths are tied to the correct linear points of reference.

3.2. Feature Class: SUP_Fac_Point (Point Shared Use Path Features)

3.2.1 Entity = ENTITY (text, 50 characters)

For existing facilities, use the credible entity, agency, or organization who is responsible for the collection, storage or maintenance of the shared use facility data being submitted. For proposed facilities, enter data only from governmental agencies with adopted plans, or entities reporting on professional studies (corridor, feasibility, etc.) where the locality was involved.

3.2.2 Plan Year = PLAN_YEAR* (short integer, precision 4)

If the shared use path point data is taken from an adopted plan, enter the date in year format in which the plan was adopted.

3.2.3 Collection Year = COLCT_YEAR* (short integer, precision 4)

The date, in year format, when the data was most recently collected and/or updated.

3.2.4 Existing Amenities = EXST_AMEN (text, 30 characters)

Inventory of existing amenities related to shared use path facilities. If multiple features are in one location, each feature should be an individual data point. Points generally specific to bicycling amenities such as bike parking and bike share stations and are found within the Bicycling Point layer to avoid duplication in collecting, recording, and inputting data.

- Motor Vehicle Parking a parking lot or other designated parking area for motorized vehicles
- **Bench** a sitting area
- Restroom a place equipped with lavatories for public use
- Lockers a place to securely store items on a temporary basis
- Water Fountain a public source to obtain drinking water

3.2.5 Existing Access Point = EXST_ACCES* (text, 30 characters)

Inventory of existing access point to shared use path facility. Note that existing access point may serve bicyclists, pedestrians, or both, but that it is a feature specifically linked to a shared use path.

- **Trailhead** The primary access point to a shared use path and may have several amenities and parking located at that terminus.
- Access point Locations where a bicyclist or pedestrian can get access a shared use path these must be unique points other than just a place where a SUP may cross a road at-grade.

3.2.6 Existing Crossing Treatment = EXST_TRTMT (text, 50 characters)

Inventory of point data for existing crossing treatments or features related to a shared use path facility. Points generally specific to pedestrian facilities (i.e. crosswalks and crossing islands) are found within the Pedestrian Point layer and points generally specific to bicycling facilities (i.e. bike detection) are found in the bicycling point layer to avoid duplication in collecting, recording, and inputting data.

- **SUP Signal*** a signal head providing special types of traffic signal indications exclusively intended for controlling shared use path traffic
- **Bollard** a short, vertical post, intended to prevent motor vehicle traffic from entering a shared use path facility
- Underpass (for SUP-specific facilities)* a structure that crosses under another roadway or thoroughfare, specific to shared use path use
- Overpass (for SUP-specific facilities)* a structure or bridge that crosses over another roadway or thoroughfare, specific to shared use path use

3.2.7 Existing Signage = EXST_SIGN (text, 80 characters)

Existing signage with messaging oriented to shared use path users or to motorists regarding a shared use path.

- **Trail Crossing** (W11-15P or W11-15a)
- Railroad Crossing Signage
- Destination and Guide Sign unspecified
- Warning Sign unspecified
- Regulatory Sign unspecified

3.2.8 Proposed Amenities = PROP_AMEN (text, 30 characters)

Inventory of point data for proposed amenities related to shared use path facilities. If multiple features are in one location, each feature should be an individual data point. Points generally specific to bicycling amenities such as bike parking and bike share stations and are found within the Bicycling Point layer to avoid duplication in collecting, recording, and inputting data.

- Motor Vehicle Parking a parking lot or other designated parking area for motorized vehicles
- **Bench** a sitting area
- Restroom a place equipped with lavatories for public use
- Lockers a place to securely store items on a temporary basis
- Water Fountain a public source to obtain drinking water

3.2.9 Proposed Access Point = PROP_ACCES* (text, 30 characters)

Inventory of proposed access point data on shared use path facilities. Note that proposed access points may serve bicyclists, pedestrians, or both, but that it is a feature specifically linked to a shared use path.

- **Trailhead** The primary access point to a shared use path and may have several amenities and parking located at that terminus.
- Access point Locations where a bicyclist or pedestrian can get access a shared use path these must be unique points other than just a place where a SUP may cross a road at-grade.

3.2.10 Proposed Crossing Treatment = PROP_TRTMT* (text, 50 characters)

Proposed or planned crossing treatments or features related to a shared use path facility. Points generally specific to pedestrian facilities (i.e. crosswalks and crossing islands) are found within the Pedestrian Point layer and points generally specific to bicycling facilities (i.e. bike detection) are found in the bicycling point layer to avoid duplication in collecting, recording, and inputting data.

- **SUP Signal** a signal head providing special types of traffic signal indications exclusively intended for controlling shared use path traffic
- **Bollard** a short, vertical post, intended to prevent motor vehicle traffic from entering a shared use path facility
- Underpass (for SUP-specific facilities) a structure that crosses under another roadway or thoroughfare, specific to shared use path use
 - Overpass (for SUP-specific facilities) a structure or bridge that crosses over another roadway or thoroughfare, specific to shared use path use

3.2.11 Proposed Signage = PROP_SIGN (text, 80 characters)

Proposed signage with messaging specifically for shared use path users or to motorists regarding a shared use path.

- **Trail Crossing** (W11-15P or W11-15a)
- Railroad Crossing Signage
- Destination and Guide Sign unspecified
- Warning Sign unspecified
- Regulatory Sign unspecified